

# ***Heissocteus ernsti* nov.gen. et nov.sp. (Heteroptera, Cydnidae) from Zambia<sup>1</sup>**

J. A. LIS

**Abstract:** *Heissocteus ernsti* nov.gen. et nov.sp. from Zambia is described and illustrated; the new genus is related to *Cephalocteus* DUFOR and therefore it is placed in the tribe Cephalocteini within the subfamily Cephalocteinae.

**Key words:** Cephalocteinae, Cydnidae, *Heissocteus ernsti*, Heteroptera, new genus, new species, Zambia.

## **Introduction**

The tribe Cephalocteini of the subfamily Cephalocteinae contained only a single genus *Cephalocteus* DUFOR, so far (LIS 1999). During my studies on the African Cydnidae collected by Dr. U. Göllner-Scheidig (Berlin, Germany) I have traced a single female of a new species superficially similar to representatives of the genus *Cephalocteus*. Nevertheless, more detailed study has shown that this new species represented also a new genus.

Descriptions of both new taxa are presented below. Terminology concerning adult cephalic chaetotaxy follows LIS & PLUOT-SIGWALT (2002).

## ***Heissocteus* nov.gen.**

Type species: *Heissocteus ernsti* nov.sp. Gender of the genus: masculine.

**Diagnosis:** The new genus is closely related to *Cephalocteus* and at first sight its single species is superficially similar to dark coloured specimens of *C. scarabaeoides* (FABRICIUS); nevertheless, it can easily be distinguished from the only known genus of Cephalocteini by two distinct characters, i.e. the presence of ocelli (ocelli absent in *Cephalocteus*) and the corium divided into clavus, meso- and exocorium (the clavo-corial suture and suture between meso- and exocorium absent in *Cephalocteus*).

**Description:** Body robust, distinctly convex, almost twice longer than broad.

Head broader than long; paraclypeus with two primary setae (hair-like) and a row of secondary setae (including short peg-like setae and long hair-like setae); eyes small and narrow, faintly protruding, apical primary peg-like seta (VI) present along with an additional peg-like seta posterior to the apical one; ocelli present and well visible; antennae five-segmented.

Pronotum trapezoid in outline; umbones only slightly swollen, postero-lateral margins of pronotum clearly visible; lateral margins with broad bands of numerous long hair-like setae; propleural depression well developed, deep; pleural evaporative areas large, mesopleural evaporative area with a polished band reaching the apex of peritreme, the latter well differentiated, ostiolar pore well visible, placed posteriorly on the peritreme.

Scutellum broad with scutellar apex tongue-like.

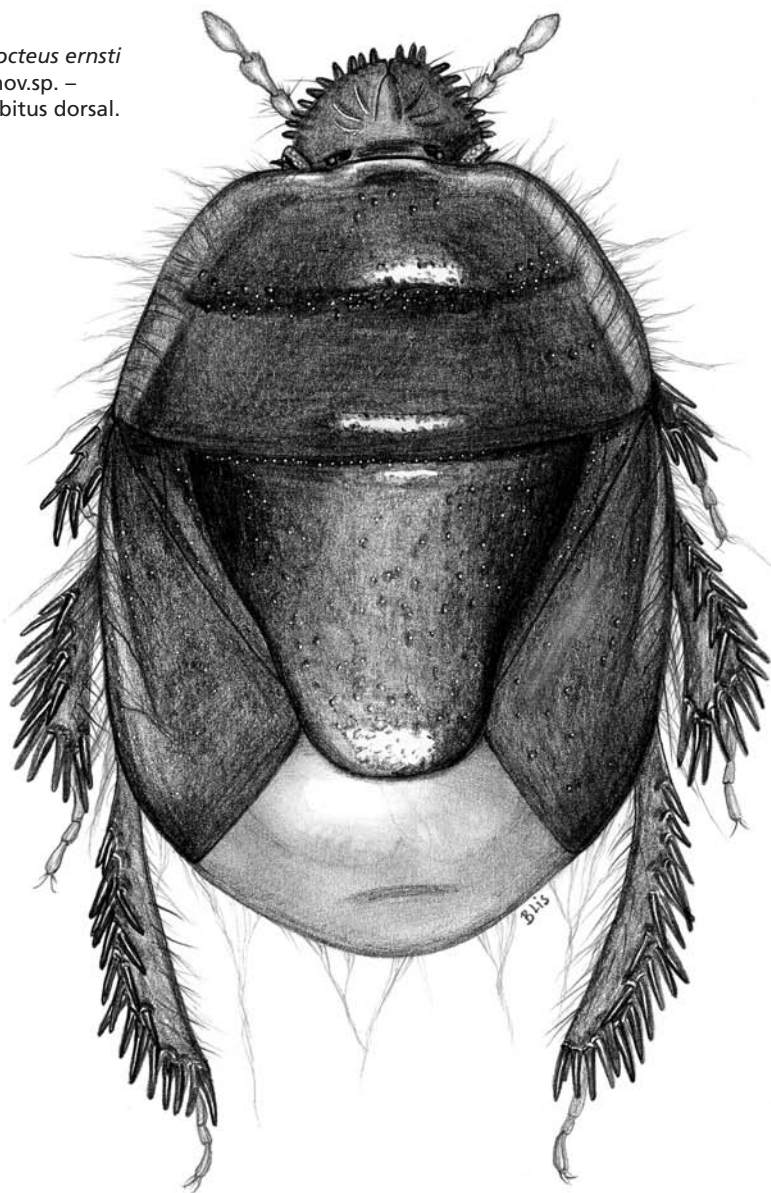
Hemelytron with corium divided into clavus, meso- and exocorium; membrane normally developed.

Legs with tibiae more or less flattened and armed with long stout setae; anterior tibia with tarsus inserted subapically; coxal combs present.

Abdominal trichobothrial arrangement as in the genus *Cephalocteus*.

<sup>1</sup> This paper is dedicated to Ernst Heiss on the occasion of his 70<sup>th</sup> birthday.

**Fig. 1:** *Heissocteus ernsti* nov.gen. et nov.sp. – holotype, habitus dorsal.



***Heissocteus ernsti* nov.sp.  
(Fig. 1)**

Type material: Holotype female: Zambia, Chunga Camp, Kafue N.P., 15°02'S/26°00'E, 26.-29.III.1993, leg. Göllner; Museum Berlin, Germany (in the collection of the Museum für Naturkunde der Humboldt-Universität, Berlin, Germany).

Diagnosis: As for the genus.

Description: Body length 4.02 mm, body width 2.54 mm; its dorsal surface convex, with ground colour castaneous; antennae brown; head, as well as margins of pronotum and hemelytra darker in shade, blackish brown; dorsal surface shiny with clearly visible puncturation.

Head somewhat broader than long (width: 1.01 mm, length: 0.90 mm); dorsal surface slightly convex, almost entirely impunctate except for small, hardly visible punctures in its posterior part; paraclypei with a few wrinkles; clypeus strongly tapering apicad and distinctly shorter than paraclypei, but apices of the latter not joined together in a front of the former; apex of clypeus with a pair of long hair-like secondary setae; paraclypeus with two primary hair-like setae (III and V, seta III slightly shifted antero-laterad), primary hair-like seta IV absent, lateral margin of paraclypeus with a row of 17-19 secondary setae (11-13 short and more or less blunt peg-like setae, and 6 long hair-like setae); eyes reddish brown, small and narrow, faintly protruding, two apical peg-like setae present (the primary seta VI and an additional seta posteriorly to the apical one); ocular index 7.7; ocelli coloured as the eyes, small, ocellar index 12.3, interocellar distance 3.5 times the distance of ocellus from the eye; antennae short, first two segments elongated, cylindrical, three others more or less bulbous, 1<sup>st</sup> segment the longest, length of segments (in mm): I 0.28, II 0.13, III 0.19, IV 0.19, V 0.21; bucculae wrinkled, weakly punctured, short and narrow, reaching slightly behind a half-length of head; gular plates almost impunctate; rostrum short, reaching the base of mid-coxae.

Pronotum trapezoid in outline (max. width: 2.37 mm, max. length: 1.27 mm), its dorsal surface clearly punctured, especially in its posterior half; calli flattened, hardly visible, almost impunctate; umbones only slightly swollen, postero-lateral margins of pronotum clearly visible; anterior margin deeply concave, posterior margin slightly convex, almost straight at the base of scutellum; lateral margins with broad bands of very numerous long hair-like setae; propleural depression well developed, deep, bearing a row of coarse punctures, anterior and posterior propleural convexities impunctate.

Scutellum broad (width: 2.37 mm, length: 1.27 mm), its apex tongue-like; scutellar disc evenly punctured with numerous well visible punctures as large as those on the pronotal disc; antero-lateral angles weakly punctured; antero-lateral submargins with several coarse punctures bearing long hair-like setae.

Corium almost evenly punctured with punctures as large as those of pronotum and scutellum; clavus with two rows of well separated punctures; mesocorium with two rows of punctures paralleling clavo-corial suture only slightly differentiated; costal margin reflected downward, lateral portion of exocorium with a band of numerous setigerous punctures bearing long hair-like setae; membrane semihyaline, pale brown, its apex reaching the tip of abdomen.

Abdominal sterna with small punctures, sterna of the first two visible segments and the last segment almost entirely punctured, the other segments with median part less punctured than the lateral parts.

Legs with tibiae more or less flattened; anterior tibia broadened apically, with the apical part prolonged beyond the point of tarsal insertion, tibial outer margin with long stout spines, its inner margin with several shorter spines, dorsal and ventral surface of anterior tibia with several long hair-like setae; middle tibia broadened apically, its ventral surface with numerous long stout spines, dorsal surface slightly flattened and smooth bearing numerous long hair-like setae (no spines present); posterior tibia long, its ventral surface with numerous long stout spines, its dorsal surface strongly flattened bearing numerous long hair-like setae (no spines present).

Distribution: Zambia.

## Acknowledgements

I would like to express my sincere thanks to Dr. U. Göllner-Scheiding (Museum für Naturkunde der Humboldt-Universität, Berlin, Germany) for the loan of the specimen, and to my wife, Barbara, for the illustration of the holotype total habitus.

## Zusammenfassung

*Heissocteus ernsti* nov.gen. et nov.sp. aus Sambia wird beschrieben und abgebildet. Die neue Gattung steht *Cephalocteus* DUFOR nahe und wird in den Tribus Cephalocteini der Unterfamilie Cephalocteinae gestellt.

## References

- LIS J.A. (1999): Taxonomy and phylogeny of Cephalocteinae with a reference to their historical biogeography (Hemiptera: Heteroptera: Cydnidae). — Pol. Pismo Entomol. **68**: 111-131.
- LIS J.A. & D. PLUOT-SIGWALT (2002): Nymphal and adult cephalic chaetotaxy of the Cydnidae (Hemiptera: Heteroptera), and its adaptive, taxonomic and phylogenetic significance. — Eur. J. Entomol. **99**: 99-109.

## Address of the Author:

Prof. Dr. Jerzy A. LIS  
Department of Biosystematics  
Division of Invertebrate Zoology  
University of Opole  
Oleska 22, 45-052 Opole, Poland  
E-Mail: [cydnus@uni.opole.pl](mailto:cydnus@uni.opole.pl)